

ABSTRACT

1 The parallel execution processor 100 fetches a piece of
2 instruction data. When the piece of instruction data includes
3 only one instruction, the instruction decoding unit 120 assigns
4 the one instruction to all the PEs. When the piece of instruction
5 data includes two instructions, the instruction decoding unit
6 120 forms all the PEs into two groups, so as to assign one
7 instruction to each group. By making it possible to execute,
8 in parallel, not only one type of instruction but also
9 instructions that are different from each other, it is possible
10 to improve the utilization efficiency of the parallel execution
11 processor 100.